

QUARTERLY STATUS REPORT
RFCA IMPLEMENTATION
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
SECOND QUARTER FISCAL YEAR 2000

1.0 Introduction

Pursuant to paragraph 263 of the Rocky Flats Cleanup Agreement (RFCA or Agreement), this quarterly status report presents the progress toward implementation of activities covered under the Agreement. The RFCA is a legally binding agreement between the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) to accomplish required cleanup of radionuclide and hazardous substance contamination at and from the Rocky Flats Environmental Technology Site (RFETS or Site).

This report describes key activities that occurred from January 2000 through March 2000 (referred to as the second quarter of fiscal year [FY] 00). The sections of this report are organized into the following topics: (1) Introduction; (2) Site-wide Activities Implementing RFCA and Supporting Site Closure; (3) Site Closure Projects; (4) RFCA Milestones and Target Activities; (5) Water Management; and (6) List of Approved Decision Documents.

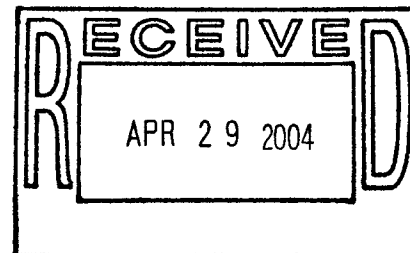
2.0 Site-wide Activities Implementing RFCA and Supporting Site Closure

Site-wide activities implementing RFCA and supporting site closure during the second quarter of FY00 include (1) Accelerating Cleanup: Path to Closure, (2) Closure Project Baseline (CPB); (3) Integrated Monitoring Plan (IMP), (4) Actinide Migration Evaluation (AME); (5) RFCA Standard Operating Protocol (RSOP) Update, and (6) Decontamination and Decommissioning (D&D) Characterization Protocol and the Reconnaissance Level Characterization (RLC) Plan Update. Additionally, the RFCA Closure Grant was approved and effective April 1, 2000 to fund CDPHE RFCA oversight activities. This grant replaced the former Agreement-in-Principle and Interagency Agreement grants and is designed to cover during the closure project lifecycle

2.1 Accelerating Cleanup: Path to Closure

The *Path to Closure* document is based on the Integrated Planning, Accountability, and Budgeting System (IPABS) database, through which Kaiser-Hill Company, L. L. C. (KH) provides current project data to DOE. During the second quarter of FY00, KH updated the IPABS database in all three areas of RFETS participation: planning, project execution, and waste stream disposition.

2.2 Closure Project Baseline



1
14

The new KH/DOE contract for the Closure of Rocky Flats, signed on January 24, 2000 with a contract start date of February 1, 2000, focuses attention and resources on six key projects. Work has begun on redefinition of the CPB around those projects. The contract requires delivery of an updated CPB by June 30, 2000.

Under contract to DOE, Ernst and Young completed a Baseline Confidence Review of the 2006 CPB in the fourth quarter of FY99. Their comments are being used in developing the revised CPB.

2.3 Integrated Monitoring Plan

The IMP Surface Water, Groundwater and Air Working Groups have convened at various times during the second quarter of FY00 to deal with issues related to special project monitoring in the Industrial Area (IA) Operable Unit (OU) during D&D and environmental restoration (ER) activities; to define a synoptic sampling scenario to search for the cause of elevated concentrations of action levels in surface water above the Point of Compliance (POC) at GS-10; and to review the proposed air monitoring studies that are intended to provide data relating to Actinide Modeling assessments of airborne soil erosion following a wildfire. All of these activities are ongoing, with the exception of the air monitoring review for the prescribed burn.

The most promising results from these meetings center around better definition of a monitoring "template" for surface water monitoring around D&D and ER projects. A flow-chart has been developed that shows how each step in the monitoring process is evaluated, what causes implementation of a particular type of monitoring, and what the data are to be used for. In particular it shows how the data can be used to guide future remediation decisions and other, possibly more immediate, pollutant control activities if necessary.

Future activities within the IMP will be the review of analytes, especially organic compounds, and revisions to the air monitoring special projects monitoring template to better define levels of radionuclide activity that trigger project activity reviews. Most importantly, issues related to the use of hardness data and the basis for the 30-day moving average for calculating RFCA surface water average concentrations will be extensively discussed and resolved.

2.4 Actinide Migration Evaluation

During the second quarter of FY00, the AME Group conducted the following activities:

- (1) A regulator and stakeholder meeting was held on January 10, 2000 to discuss. (a) the actinide conceptual model; (b) the actinide soil kriging results; and (c) the soil aggregation experiment results
- (2) A regulator and stakeholder meeting was held on March 1, 2000 to discuss the reaction of plutonium dioxide with water, particularly the formation and properties of higher binary oxides ($\text{PuO}_{2,x}$) and the role of colloidal transport of radionuclides in the environment. The discussion focused on the applicability of the data presented in the following articles to transport of plutonium through the environment at RFETS.

- J. M. Haschke, T. H. Allen, and L. A. Morales, *Reaction of Plutonium Dioxide with Water. Formation and Properties of PuO_{2+x}*, Science, Volume 287, January 2000, pages 285-287
 - J. M. Haschke, et al, *Oxidized Plutonium Reaches a Higher State*, Science News, February 2000
 - B. Kersting, D. W. Efur, D. L. Finnegan, D. J. Rokop, D. K. Smith, and J. L. Thompson, *Migration of Plutonium in Ground Water at the Nevada Test Site*, Nature, Volume 397, January 1999, pages 56-59.
- (3) A soil sample collected prior to demolition of Building (B) 779 was shipped to Los Alamos National Laboratory (LANL) for plutonium, americium, and uranium valence analyses. Radioactively contaminated concrete samples from B371 and B776 were also shipped to LANL for plutonium, americium and uranium valence analyses
 - (4) A revised draft of the Actinide Migration Project Data Quality Objectives Framework has been reviewed by the AME Advisors and is being finalized.
 - (5) The draft *Report on Soil Erosion/Surface Water Sediment Transport Modeling for the Actinide Migration Evaluations at the Rocky Flats Environmental Technology Site* was issued for review by the AME Advisors on April 28, 2000.
 - (6) RFETS groundwater samples are being analyzed by Inductively-Coupled Plasma/Mass Spectrometry (ICP/MS) analyses at LANL.

A public AME Meeting was held on April 18, 2000 to discuss the actinide migration conceptual model, the Science and Science News articles, response to Citizens Advisory Board Technical Review Group comments on Dr. Honeyman's report, *Actinide Migration Studies at the Rocky Flats Environmental Technology Site. The Effect of Soil-Water Redox Potential on 239,240 Pu Solubility*, and the colloid transport studies. Results of the meeting will be included in next quarter's report.

2.5 RFCA Standard Operating Protocols Update

Two RSOPs are under development. The RSOP for Facility Disposition, once approved, may be applied to all facilities at RFETS that meet the unrestricted release criteria. This RSOP was developed to document the facility disposition decision; establish the demolition process requirements and controls, assess the environmental consequences of demolishing a facility; and documents the environmental impacts of shipping Low Level (LL) and Low Level Mixed Waste (LLMW) from RFETS to appropriate disposal facilities.

A second RSOP, RSOP for Facility Component Removal, Size Reduction, and Decontamination Activities, once approved, may be applied to all facilities at RFETS that require decommissioning activities including, physical removal of facility components; size reduction of components to meet property reuse, waste management and/or transportation requirements; and decontamination of components in preparation for removal, size reduction, and/or building demolition.

Informal discussions on both RSOPs were held with the regulators and stakeholders during the second quarter of FY00. An early draft of the RSOP for Facility Disposition was provided to the regulators and stakeholders during the second quarter of FY00; a formal public review period of this RSOP is expected during the third quarter of FY00.

2.6 Decontamination and Decommissioning Characterization Protocol and the Reconnaissance Level Characterization Plan Update

By letter dated March 24, 2000, DOE transmitted the D&D Characterization Protocol (Protocol) and the RLC Plan to the regulators. The Protocol was transmitted to the CDPHE and EPA for concurrence as required by section 2.3 of the Decommissioning Program Plan.

3.0 Site Closure Projects

3.1 Industrial Area Operable Unit, Building 779 Cluster Closure Project

The Decommissioning Operations Plan (DOP) for the B779 Cluster Project was approved by CDPHE on February 6, 1998. Decommissioning activities were initiated in FY98 with equipment and glovebox removal. As of March 31, 2000, all decommissioning activities approved by the DOP were completed and the 779 Cluster had been demolished. The Decommissioning Final Closeout Report was initiated. Completion of the Decommissioning Final Closeout Report and turn over of the Cluster area and slab to the ER organization is planned for the third quarter of FY00. ER activities are currently scheduled to be initiated in FY02. The FY00 RFCA Milestone, complete demolition to slab of B779 by 9/30/00, is complete.

3.2 Industrial Area Operable Unit, Building 771 Closure Project

The B771/774 Closure Project DOP was approved by CDPHE on January 11, 1999. Five D&D worksets have been completed in B771 through the end of the second quarter of FY00.

3.3 Industrial Area Operable Unit, Building 776 Closure Project

The B776/777 Closure Project DOP was approved by CDPHE on November 5, 1999. Two D&D worksets have been completed in B776 through the end of the second quarter of FY00.

The following activities have been completed through the second quarter of FY00 in support of FY00 RFCA Target Activity, Close Material Access Area (MAA) in B776:

- (1) Removed Special Nuclear Material holdup from four gloveboxes.
- (2) Completed 225 Wall-to-Wall NDA scans and 50 glovebox verification scans.
- (3) Completed security procedure revisions for the Q-to-L security level reduction.
- (4) Completed holdup characterization and the vulnerability assessment.
- (5) Completed removal of all classified items from gloveboxes.
- (6) Completed dispositioning all classified drums into a secure repository.

The MAA in B776 is scheduled to be closed during the third quarter of FY00

3.4 Industrial Area Operable Unit, Building 371/374 Closure Project

During the second quarter of FY00, the B371/374 Team conducted the following activities:

- (1) Initiated RLC of the cluster This characterization effort is currently behind schedule due to characterization resources being diverted to the B707 Closure Project Team.
- (2) Initiated the B371/374 Closure Project DOP. A draft of the first four sections of the DOP was released for internal review and comment. This draft has been informally shared with the regulators for their informal review and comment.
- (3) Two meetings were held with CDPHE to close issues raised at the December Joint Scoping Meeting All issues have been satisfactorily resolved.

Activities planned for the third quarter of FY00 include: complete the RLC and RLC Report and continue work on the DOP The draft DOP was scheduled for completion during the third quarter of FY00; however, completion has been delayed due to reducing the Protected Area around B371 during 2001 which has significant impact on the B371 nuclear mission. It is likely that the start of D&D will be later than originally planned in the 2006 CPB. The B371 Team will rephase completion of the DOP and the start of decommissioning in conjunction with the update CBP due to DOE by June 30, 2000.

By letter dated March 28, 2000, DOE notified EPA and CDPHE that FY00 RFCA Target Activity, Install and Operate the Plutonium Packaging system in B371 by March, would not be met. In accordance with RFCA, a plan to modify the original PuSPS campaign strategy was submitted with the March 28, 2000 letter. The new strategy involves delaying startup of plutonium (Pu) metals packaging to allow for startup of the Pu oxides stabilization system, thereby accelerating packaging of Pu oxides This strategy should reduce the overall schedule by one month, while saving approximately \$1 0 million in costs.

3.5 Industrial Area Operable Unit, Building 707 Closure Project

During the second quarter of FY00, the B707 Team conducted the following activities:

- (1) Initiated RLC of the cluster.
- (2) Initiated the B707 Closure Project DOP A draft of the first four sections of the DOP was released for internal review and comment. This draft has been informally shared with the regulators for their informal review and comment.

Activities planned for the third quarter of FY00 include: complete the RLC and RLC Report and continue work on the DOP

3.6 Remediation, Industrial, & Site Services Project

3.6.1 Industrial Area Operable Unit, B886 Cluster Closure Project

CDPHE approved the Interim Measure/Interim Remedial Action (IM/IRA) for the B886 Cluster Closure Project on August 3, 1998. Strip out and removal of selected equipment, and nine tanks and all associated piping in rooms 101 and 103 of B886 was completed in FY99. Decommissioning activities are not currently funded for FY00.

3.6.2 Industrial Area Characterization and Remediation Strategy

The Industrial Area Characterization and Remediation Strategy (IA Strategy), submitted to CDPHE and EPA in FY99, provides a roadmap to closure of the IA OU. The IA Strategy integrates characterization and remediation of the IA individual hazardous substance sites (IHSS) with D&D activities. The IA Strategy also addresses other interfaces and streamlining actions essential to achieving the goals of the 2006 CPB.

The first action of the IA Strategy is to develop an Industrial Area Sampling and Analysis Plan (IASAP). In the second quarter of FY00, draft data quality objectives (DQOs) were submitted to CDPHE and EPA. Comments were received from CDPHE and were being incorporated into the DQOs at the close of the quarter. In conjunction with the DQOs, a data filter process was developed to assess usability of existing analytical data from the IA. Usability analysis was underway at the end of the quarter. In addition to the DQOs, an outline of the IASAP was developed. As the quarter closed, internal review comments were being resolved. The outline will be discussed with CDPHE and EPA early in the third quarter of FY00. A draft IASAP will be developed after consensus is reached on the DQOs and the outline. The IASAP will require approval by EPA and CDPHE prior to implementation.

3.6.3 Buffer Zone Operable Unit, 903 Pad

To address the EPA's and CDPHE's concerns about the large scope of environmental restoration work currently scheduled for the final two years of the RFETS closure project, the RFCA Parties have agreed to pursue a proposal for the EPA to assume responsibility for 903 Pad remediation. If this proposal is adopted, the DOE agrees to provide funding to the EPA for the remediation. The Parties believe that any such remediation project assumed by the EPA should begin in FY02. The Parties will define the regulatory, site support, and contractual framework of the proposal by June 30, 2000. In the event 903 Pad remediation is not assumed by the EPA 903 Pad remediation by the Site contractor will begin in FY03, with completion in FY05. Due to uncertainty regarding which entity will perform the project, KH suspended all document preparation work pending the June 30, 2000 decision date.

3.6.4 OU1

During the second quarter of FY00, DOE proposed to EPA and CDPHE modifications to the OU1 Corrective Action Decision/Record of Decision (CAD/ROD). After receiving written comments from EPA and CDPHE, DOE has decided to not pursue a major modification to the

OU1 CAD/ROD at this time DOE will continue, as described in the original OU1 CAD/ROD, to collect and treat groundwater from the collection well through this FY and decommission the french drain.

3.6.5 OU7

Samples have been collected for one year in accordance with the November 1998 addendum to the OU7 Sampling and Analysis Plan (SAP). A report entitled, "Evaluation of OU7 Aeration Treatment System, November 1998-October 1999" was written during the first quarter of FY00 and transmitted to the agencies. The system has, in most cases, met the treatment objectives for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The report supports the semi-annual sampling, which is planned to replace the monthly sampling schedule. The purpose of monthly sampling was to characterize VOCs and SVOCs from the treatment system influent and metals and radionuclides from the effluent. The OU7 SAP will be revised and submitted to the Agencies for review and approval prior to collecting the first semi-annual sample in June 2000.

Remediation of the OU7 landfill will be addressed in accordance with the Rocky Flats Closure Project schedule.

3.6.6 IHSS 118.1

Comments have been received from CDPHE on the "Status Report for Monitoring of Natural Attenuation at IHSS 118.1." A response will be prepared by DOE and the KH Team and submitted by DOE to CDPHE during the third quarter of FY00. Three sets of samples have been collected on a semi-annual schedule since March 1999, based on the SAP for monitoring at IHSS 118.1. A fourth round of samples from the eight monitoring wells will be collected during the third quarter of FY00.

3.7 Materials Stewardship

3.7.1 RFCA Milestone: Ship 6000m³ of LL/LLMW between 10/1/99 and 9/30/00.

Through the second quarter of FY00, approximately 4,446 cubic meters of LL/LLM waste has been shipped offsite.

3.7.2 RFCA Milestone: Complete 86 shipments to WIPP during FY00. This assumes WIPP is open and remains open during the fiscal year; WIPP receives a RCRA disposal permit and can accept Rocky Flats TRU and TRM by February 2000. NMED certifies shipments of Rocky Flats waste to WIPP by February 2000.

By letter dated March 28, 2000, DOE notified CDPHE and EPA that DOE does not expect to meet this milestone. The main reasons for this are 1) The Rocky Flats Field Office (RFFO) did not receive approval of the final audit report from the Secretary of New Mexico Environmental Department approving the RFFO implementation of the Waste Analysis Plan as required by the

WIPP permit until March 9, 2000, and 2) transuranic/transuranic mixed (TRU/TRM) headspace sampling activities have been significantly curtailed due to KH shutting down B776/777 where these activities occur. Discussions are continuing between the RFCA Parties to determine whether, and if so what, modifications to this milestone are appropriate

3.7.3 RFCA Milestone: Store TRU waste in B906 by September 1, 2000. If B906 is needed prior to September 1, 2000, for TRU waste storage, then B906 must be ready in time to not impact residues or D&D.

On schedule.

4.0 RFCA Milestones and Target Activities

RFCA FY00 Milestones were established on January 4, 1999. RFCA FY00 Target Activities were established on February 3, 2000. Table 1 summarizes the status of each RFCA FY00 Milestone and Target Activity

Table 1: RFCA FY00 Milestones and Target Activities

FY00-M2	Complete demolition to slab of B779 by 9/30/00	Complete
FY00-M5	Ship 6000m3 of LL/LLMW between 10/1/99 and 9/30/00	Through the second quarter of FY00, approximately 4,446 cubic meters of LL/LLM waste has been shipped offsite.
FY00-M6	Complete 86 shipments to WIPP during FY00. This assumes WIPP is open and remains open during the fiscal year; WIPP receives a RCRA disposal permit and can accept Rocky Flats TRU and TRM by February 2000. NMED certifies shipments of Rocky Flats waste to WIPP by February 2000.	DOE has notified EPA and CDPHE by letter on March 28, 2000, that DOE does not expect to meet this milestone. Discussions are continuing between the RFCA Parties on whether, and if so what, modifications to this milestone are appropriate. See section 3.7.2.
FY00-new	Store TRU waste in B906 by September 1, 2000 If B906 is needed prior to September 1, 2000, for TRU waste storage, then B906 must be ready in time to not impact residues or D&D. (i.e. Slowing down the generation rate of TRU waste is not an acceptable means of meeting this milestone).	On schedule
FY00-new	Complete 18 D&D worksets between 10/1/99 and 9/30/00	7 D&D worksets have been completed. See sections 3.2 and

8

		3.3.
FY00-T1	Complete eU shipments, except eU contaminated with plutonium. (Uncertainties beyond RFFO control are acknowledged to exist in the availability of receiver sites and transportation corridors)	Complete
FY00-T2	Install and operate the Plutonium Packaging System in Building 371 by March	This target activity was not met. See section 3 4
FY00-T3	Close Material Access Area in Building 776.	On schedule; see section 3 3.

5.0 Water Management

Water management activities during the first and second quarters of FY00 are summarized by (1) Watershed Improvements; (2) Surface Water Management, (3) Surface Water Monitoring; (4) Ground Water Monitoring ; and (5) the Rocky Flats Water Working Group.

5.1 Watershed Improvements

No watershed improvements were implemented during the first or second quarter of FY00.

5.2 Surface Water Management

5.2.1 First Quarter of FY00

During the first quarter of FY00, the Site completed the following pond water transfers and discharges totaling 33 77 Million Gallons (MG), a decrease of 13% compared to the first quarter of FY99 (38.69 MG). This decrease is attributable to below average stormwater runoff during the period, and no Pond B-5 pumped-transfers to Pond A-4.

Pond A-3 activity included two routine outlet-valve direct discharges to Pond A-4 totaling 5.41 MG The first discharge of 1.91 MG occurred during the period of October 4 through 6, 1999. The second discharge of 3.50 MG occurred during the period of October 26 through 29, 1999.

Pond B-5 activity included two routine outlet-valve direct discharges to South Walnut Creek (SWC) totaling 28.36 MG The first discharge of 14 77 MG occurred during the period of October 4 through 18, 1999 The second discharge of 13.59 MG occurred during the period of December 1 through 13, 1999 Water-quality samples were collected and analyzed, and all approvals were obtained prior to the discharges The City of Broomfield diverted the Pond B-5 discharges around Great Western Reservoir via the Broomfield Diversion Ditch.

9

There was no Pond A-1, A-2, A-4, B-1, B-2, C-2, or Landfill transfer or discharge activity during the first quarter of FY00

Transfers and discharges from the Site ponds during the first quarter of FY00 are summarized in Table 2.

Table 2. Site Pond-Water Transfers and Discharges - First Quarter FY00

Dates	Pond Activity	Total MG	Mode
10/4 to 10/6	A-3 to A-4	1 91	Outlet-valve direct discharge
10/26 to 10/29	A-3 to A-4	3 50	Outlet-valve direct discharge
10/4 to 10/18	B-5 to SWC	14.77	Outlet-valve direct discharge
12/1 to 12/13	B-5 to SWC	13 59	Outlet-valve direct discharge
	Total for Quarter	33.77 MG	

5.2.2 Second Quarter of FY00

During the second quarter of FY00, the Site completed the following pond water transfers and discharges totaling 37.17 MG, a decrease of 24% compared to the second quarter of FY99 (48.61 MG). This decrease is attributable to below average stormwater runoff during the period, and no Pond B-5 pumped-transfers to Pond A-4.

Pond A-3 activity included two routine outlet-valve direct discharges to Pond A-4 totaling 7.09 MG. The first discharge of 3.59 MG occurred during the period of January 24 through 28, 2000. The second discharge of 3 50 MG occurred during the period of March 24 through 27, 2000.

Pond A-4 activity included one routine outlet-valve direct discharge to North Walnut Creek (NWC) totaling 9.50 MG. This discharge occurred during the period of March 16 through 24, 2000. Water-quality samples were collected and analyzed, and all approvals were obtained prior to the discharge. The City of Broomfield diverted the Pond A-4 discharge around Great Western Reservoir via the Broomfield Diversion Ditch.

Pond B-5 activity included two routine outlet-valve direct discharges to SWC totaling 20.58 MG. The first discharge of 10 08 MG occurred during the period of January 27, 2000 through February 7, 2000. The second discharge of 10 50 MG occurred during the period of March 16 through 27, 2000. Water-quality samples were collected and analyzed, and all approvals were obtained prior to the discharges. The City of Broomfield diverted the Pond B-5 discharges around Great Western Reservoir via the Broomfield Diversion Ditch.

There were no Pond A-1, A-2, B-1, B-2, C-2, or Landfill transfers or discharges during the second quarter of FY00

Transfers and discharges from the Site ponds during the second quarter of FY00 are summarized in Table 3

Table 3. Site Pond-Water Transfers and Discharges - Second Quarter FY00

Dates	Pond Activity	Total MG	Mode
1/24 to 1/28	A-3 to A-4	3 59	Outlet-valve direct discharge
3/24 to 3/27	A-3 to A-4	3 50	Outlet-valve direct discharge
1/27 to 2/7	B-5 to SWC	10.08	Outlet-valve direct discharge
3/16 to 3/27	B-5 to SWC	10.50	Outlet-valve direct discharge
3/16 to 3/24	A-4 to NWC	9 50	Outlet-valve direct discharge
	Total for Quarter	37.17 MG	

5.3 Surface Water Monitoring

5.3.1 First Quarter of FY00

During the first quarter of FY00, 54 automated monitoring system samples were collected and submitted for analysis. All 30-day moving average results for RFCA Point of Evaluation (POE) and POC monitoring locations were well below the RFCA action levels and standards

5.3.2 Second Quarter of FY00

During the second quarter of FY00, 29 automated monitoring system samples were collected and submitted for analysis.

Performance and Source Location monitoring location SW120 was installed to support the D&D activities for the B771/774 area. SW120 is located northeast of the B771/774 complex and will collect continuous flow-paced composite samples of surface water originating as runoff and footing drain discharge. The sub-drainage tributary to SW120 covers an area of approximately 12.8 acres. This location monitors surface water upstream of RFCA POE SW093.

Plans to install a second B771/774 Performance and Source Location monitoring station (GS44) have been finalized and approved. Surface Water is working with B771 personnel to coordinate installation and operation. GS44 will be located west of the B771/774 complex between T771F

and T771L and will be operational by mid-April. This location will also collect continuous flow-paced composite samples of surface water originating as runoff and footing drain discharge. The sub-drainage tributary to GS44 covers an area of approximately 4.1 acres

In preparation for the new Site National Pollutant Discharge Elimination System (NPDES) permit, field investigations were conducted to determine the engineering requirements for installing a new RFCA POE monitoring location at the Sewage Treatment Plant (STP). As a condition of the new permit, EPA, CDPHE and DOE have agreed to modify the RFCA Action Level Framework (ALF) to establish a new action level measuring point for radionuclides at the outfall of the STP. This new POE will provide the agreed upon monitoring for radionuclides in STP effluent prior to discharge to South Walnut Creek. The proposed ALF modification will be available for public comment from March 28, 2000 through April 28, 2000.

The Site facilitated CDPHE's reconnaissance sampling related to the source-location investigation of the alleged plutonium and americium action level exceedances at RFCA POE GS10. To date, no singular actinide source can be identified as the primary contributor to the elevated 30-day average at GS10. Data and information collected and analysis performed to date do not support a singular conclusion. Most likely, multiple sources and transport mechanisms are responsible for the elevated radionuclide activities at GS10. On January 26th, the Site facilitated collection of surface water samples above GS10 for CDPHE analysis.

To facilitate the ongoing investigation of the GS10 sub-drainage, the Surface Water monitoring technical team developed a targeted sampling and analysis plan for further investigation of specific sub-drainages tributary to GS10. Based on the source evaluation conclusions to date, an automated synoptic surface-water sampling project is designed to identify spatial water-quality trends, if any, for the targeted sub-drainage areas tributary to GS10. A related project will collect sediment samples to identify spatial sediment activity trends, if any, along the stream beds and ditches that are tributary to GS10.

On February 15, 2000, the Site provided notification to the RFCA parties of probable RFCA reportable values for dissolved silver at RFCA POE SW027. The initial reporting of a dissolved silver exceedance at SW027 was based on the KH Team's interpretation of the RFCA IMP method of calculating the dissolved silver standard using event-specific hardness data resulting in a variable dissolved silver action level. In response to this notification, CDPHE provided their interpretation that the fixed RFCA ALF table values should be used for identifying and determining reportable values. In their March 1, 2000 response, CDPHE's assessment concluded that there in fact was no exceedance of the dissolved silver action level and no further action was required.

All other RFCA POE and all POC monitoring locations were below the RFCA action levels and standards during the second quarter of FY00 for all monitored metals and radionuclides.

5.4 Ground Water Monitoring

The Third (calendar) Quarter 1999 groundwater monitoring report was presented to the stakeholders at the Quarterly Information Exchange Meeting on February 28, 2000.

The SAP for the D&D Monitoring of Buildings 707, 371/374, 776/777 and 883/865 has been submitted to DOE and KH for review

Review comments for the CDPHE "Draft Industrial Area Groundwater Study" were provided to DOE as a response to issues CDPHE raised with respect to groundwater in the Industrial Area.

All groundwater samples and water level measurements for the first quarter of FY00 were completed on March 31, 2000

The ICP/MS Uranium sampling and analysis project, which is being conducted jointly with CDPHE, is 75% completed as of March 31, 2000

The Site water balance project was initiated in January 2000. Additional groundwater monitoring requirements were outlined in March to supply additional data for the water balance modeling effort. Additional groundwater monitoring was initiated in the second quarter of FY00.

5.5 Rocky Flats Water Working Group

During the second quarter of FY00, the Rocky Flats Water Working Group met once on March 21, 2000. The meeting started with the Site's Surface Water operations update. At the time, terminal Ponds A-4 and B-5 were concurrently discharging and plans were formulated to direct discharge Pond A-3 next. EPA representatives provided an update on the status and issues related to the renewal NPDES permit currently in a 30-day public comment (March 6, 2000 through April 6, 2000).

KH representatives discussed the Building Operations Guidance Books. These Guidance Books follow the Site's new contract Project Orientation. Ms. North, KH, also described the scope of her organization in the Environmental Stewardship Group, highlighting the 13 environmental programs that she manages. Among those programs are the Environmental Leadership Team, the Environmental Action Tracking System, the Chemical Tracking System, and others.

Finally, statuses of CDPHE samples collected in the Protected Area on January 26, 2000 as well as progress made on analyzing the recent predischage sample analyses were discussed by Rocky Mountain Remediation Services, L. L. C. and CDPHE representatives. This was followed by a status update provided on the Regulatory and Public Involvement Decision Matrix status and ground water remediation systems

6.0 List of Approved Decision Documents

This list of approved decision documents provides the information for the update to RFCA Attachment 12

- (1) A minor modification to the B779 DOP was submitted by DOE to CDPHE for approval on March 10, 2000. This minor modification included a description of the pits and sumps in the slabs of Buildings 779, 782, and 783 and addresses the treatment of groundwater infiltrate into these areas. CDPHE approved the minor modification on March 20, 2000.
- (2) A minor modification to the B776/777 DOP was submitted by DOE to CDPHE for approval on February 17, 2000 (Modification #2). This minor modification included language documenting an agreement between the Site project points of contact and CDPHE providing for the partial closure of a RCRA regulated unit upon engagement of the consultative process and approval by CDPHE. CDPHE approved the minor modification on February 24, 2000.
- (3) A minor modification to the B776/777 DOP was submitted by DOE to CDPHE for approval on March 3, 2000 (Modification #3). This minor modification includes RCRA unit-specific closure information for RCRA units located in Sets 7, 11, 26 and 61. CDPHE approved the minor modification on March 3, 2000.

14
14